TABLE A-2

Companies in the target population and selected for the sample, by industry and company size: 2021

(Number of companies)

Industry and company size		Companies in target population <sup>a</sup>	Companies selected for the sample		
	NAICS code		All companies	Noncertainties	Certainties
All industries	21-23, 31-33, 42-81	1,137,000	47,500	24,000	23,500
Manufacturing industries	31-33	95,500	19,500	9,700	9,600
Food	311	9,400	1,200	700	500
Beverage and tobacco products	312	3,800	450	300	150
Textile, apparel, and leather products	313-16	3,500	550	350	200
Wood products	321	4,800	650	500	150
Paper	322	1,400	400	200	150
Printing and related support activities	323	5,600	950	600	350
Petroleum and coal products <sup>b</sup>	324	350	150	30	150
Chemicals	325	5,300	2,300	600	1,700
Basic chemicals	3251	700	300	90	200
Resin, synthetic rubber, and artificial synthetic fibers and filaments	3252	550	200	80	150
Pesticide, fertilizer, and other agricultural chemicals	3253	300	150	D	150
Pharmaceuticals and medicines	3254	1,700	1,000	150	900
Soap, cleaning compound, and toilet preparation	3256	800	250	100	100
Paint, coating, adhesive, and other chemicals	3255, 3259	1,200	400	150	200
Plastics and rubber products	326	4,700	1,000	550	500
Nonmetallic mineral products	327	3,900	600	400	200
Primary metals	331	1,600	450	250	250
Fabricated metal products	332	20,000	2,400	1,600	850
Machinery	333	9,200	2,100	1,000	1,100
Agricultural implement	33311	550	200	40	150
Semiconductor machinery	333242	80	70	0	70
Engine, turbine, and power transmission equipment	3336	350	150	30	150
Other machinery	other 333	8,200	1,700	950	750
Computer and electronic products	334	4,700	1,800	550	1,200
Communications equipment	3342	550	250	30	200
Semiconductor and other electronic components	3344	1,700	500	200	300
Navigational, measuring, electromedical, and control instruments	3345	1,800	850	300	550
Electromedical, electrotherapeutic, and irradiation apparatus	334510, 334517	350	200	50	150
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments	334511	200	150		150
Other measuring and controlling devices	other 3345	1,300	500		250
Other computer and electronic products	other 334	550	200	60	150
Electrical equipment, appliances, and components	335	2,200	600	300	300
Transportation equipment	336	4,700	1,300	550	800

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(Number of companies)

Industry and company size		Companies in target population <sup>a</sup>	Companies selected for the sample		
	NAICS code		All companies	Noncertainties	Certainties
Motor vehicles, bodies, trailers, and parts	3361-63	2,900	750	300	450
Aerospace products and parts	3364	850	300	90	20
Aircraft, aircraft engine, and aircraft parts	336411-13	800	250	90	15
Guided missile, space vehicle, and related parts	336414, 336415, 336419	50	50	0	50
Military armored vehicle, tank, and tank component	336992	30	20	0	2
Other transportation equipment	other 336	900	250	150	10
Furniture and related products	337	4,300	850	500	35
Miscellaneous manufacturing	339	6,300	1,400	750	65
Medical equipment and supplies	3391	2,300	650	250	35
Other miscellaneous	3399	4,000	800	500	30
Unclassified	-	90	60	D	6
Nonmanufacturing industries	21-23, 42-81	1,039,000	25,500	14,000	11,50
Mining, extraction, and support activities	21	4,800	550	350	25
Utilities	22	750	200	40	15
Wholesale trade	42	65,500	5,400	3,800	1,60
Electronic shopping and electronic auctions	454111-12	5,300	500	350	10
Transportation and warehousing	48-49	36,500	600	150	45
Information	51	16,500	3,600	1,400	2,20
Publishing	511	5,400	1,300	550	75
Newspaper, periodical, book, and directory publishers	5111	2,300	350	200	15
Software publishers	5112	3,100	950	350	60
Telecommunications	517	2,600	500	300	25
Data processing, hosting, and related services	518	3,600	1,200	250	95
Other information	other 51	4,700	600	350	25
Finance and insurance	52	25,500	1,100	150	90
Real estate and rental and leasing	53	25,000	450	100	35
Lessors of nonfinancial intangible assets (except copyrighted works)	533	450	80	D	8
Other real estate and rental and leasing	other 53	25,000	400	100	25
Professional, scientific, and technical services	54	101,000	7,400	4,100	3,20
Architectural, engineering, and related services	5413	18,000	2,700	1,600	1,10
Computer systems design and related services	5415	16,500	3,000	1,900	1,10
Scientific research and development services	5417	2,600	2,600	0	2,60
Research and development in nanotechnology	541713	100	100	0	10
Research and development in biotechnology (except nanobiotechnology)	541714	650	650	0	65

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Companies in the target population and selected for the sample, by industry and company size: 2021

(Number of companies)

Industry and company size	NAICS code	Companies in target population <sup>a</sup>	Companies selected for the sample		
			All companies	Noncertainties	Certainties
Research and development in the physical, engineering, and life sciences (except nanotechnology and					
biotechnology)	541715	1,600	1,600	0	1,600
Research and development in the social sciences and humanities	541720	150	150	0	150
Other professional, scientific, and technical services <sup>c</sup>	other 54	66,500	1,700	700	1,000
Health care services	621-23	114,000	1,800	500	1,200
	23, 44-45 (excluding 454111-12),				
Other nonmanufacturing	55-56, 624, 71-72, 81	644,000	3,900	3,100	800
Unclassified	-	450	150	30	100
Company size (number of domestic employees)					
All companies	_	1,137,000	47,500	24,000	23,500
< 10 <sup>d</sup>	_	6,900	400	200	200
10–19	_	560,000	10,500	8,000	2,300
20-49	-	366,000	10,500	7,400	3,200
50-99	-	111,000	6,900	4,100	2,800
100-249	_	59,500	7,800	3,200	4,600
250-499	-	17,500	3,900	850	3,100
500-999	_	8,100	3,400	80	3,300
1,000-4,999	_	6,600	3,000	60	3,000
5,000-9,999	_	900	450	D	450
10,000-24,999	_	600	350	D	350
25,000 or more	-	350	200	D	200

D = suppressed to ensure confidentiality of individual companies.

NAICS = 2017 North American Industry Classification System.

<sup>&</sup>lt;sup>a</sup> Estimates of the number of companies in the target population are based on the original sampling frame that was created to select the 2021 Business Enterprise Research and Development (BERD) Survey sample. These estimates do not include 150 R&D performers from the previous year's sample, which were not on the original sampling frame but were found during the survey's annual contact update procedures. These companies were added to the 2021 sample with certainty but are not reflected in the number of certainties selected for the sample.

b Because of the widespread practice of the larger petroleum extraction and refining companies vertically integrating their activities, petroleum refineries (NAICS 32411) and oil and gas extraction (NAICS 211) were combined during sampling.

<sup>&</sup>lt;sup>c</sup> Contains companies classified in scientific research and development services (NAICS 5417) that, as of sampling, were not fully classified to the level of detail in research and development in nanotechnology (NAICS 541713), research and development in biotechnology (except nanotechnology) (NAICS 541714), research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology) (NAICS 541715), or research and development in the social sciences and humanities (NAICS 541720).

d This category includes companies that are represented on the sampling frame as having missing data, but these companies are in scope to the BERD Survey because they have at least \$500,000 in annual payroll.

National Center for Science and Engineering Statistics | NSF 23-351

## Note(s):

Beginning in survey year 2019, counts reflect a change in rounding methodology. Detail may not add to total because of rounding. Certainties are companies whose probability of selection is 1 based on prior year R&D expenditures equal to or greater than \$3 million as well as others included in the sample for analytical purposes (analytical certainties). Noncertainties are companies whose probability of selection is less than 1. Companies that were missing or had an incomplete NAICS code at the time of sampling were assigned to an Unclassified industry category temporarily. If an unclassified company reported R&D expenditures, its primary industrial activity was investigated, and a NAICS code was assigned during statistical processing.

## Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2021.